

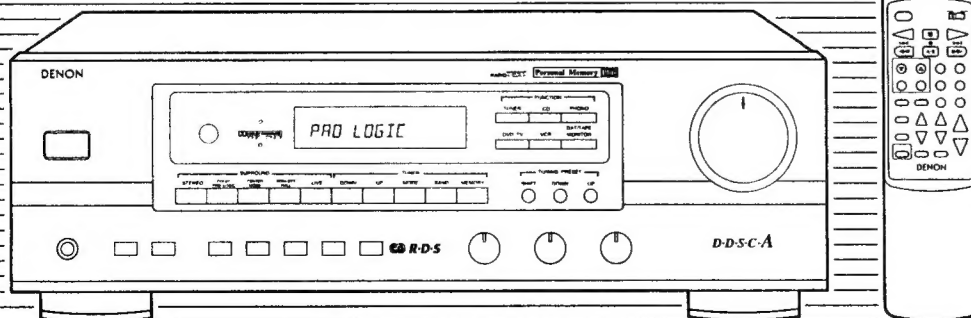
# DENON

## AV SURROUND RECEIVER

# AVR-700RD

OPERATING INSTRUCTIONS  
BEDIENUNGSANLEITUNG  
MODE D'EMPLOI  
ISTRUZIONI PER L'USO

INSTRUCCIONES DE OPERACION  
GEBRUIKSAANWIJZING  
BRUKSANVISNING



FOR ENGLISH READERS  
FÜR DEUTSCHE LESER  
POUR LES LECTEURS FRANCAIS  
PER IL LETTORE ITALIANO  
PARA LECTORES DE ESPAÑOL  
VOOR NEDERLANDSTALIGE LEZERS  
FOR SVENSKA LÄSARE

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## CAUTION

**RISK OF ELECTRIC SHOCK  
DO NOT OPEN**



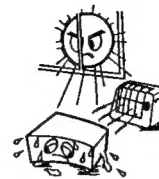
The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



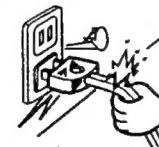
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

## NOTE ON USE / HINWEISE ZUM GEBRAUCH / OBSERVATIONS RELATIVES A L'UTILISATION / NOTE SULL'USO / NOTAS SOBRE EL USO / ALVORENS TE GEBRUIKEN / OBSERVERA



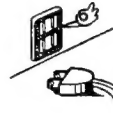
- Avoid high temperatures. Allow for sufficient heat dispersion when installed on a rack.
- Vermeiden Sie hohe Temperaturen. Beachten Sie, daß eine ausreichend Luftzirkulation gewährleistet wird, wenn das Gerät auf ein Regal gestellt wird.
- Eviter des températures élevées. Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.
- Evitate di esporre l'unità a temperature alte. Assicuratevi che ci sia un'adeguata dispersione del calore quando installate l'unità in un mobile per componenti audio.
- Evite altas temperaturas. Permita la suficiente dispersión del calor cuando está instalado en la consola.
- Vermijd hoge temperaturen. Zorg voor een degelijk hitteafvoer indien het apparaat op een rek wordt geplaatst.
- Undvik höga temperaturer. Se till att det finns möjlighet till god värmeavledning vid montering i ett rack.



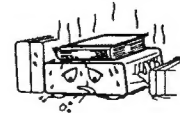
- Handle the power cord carefully. Hold the plug when unplugging the cord.
- Gehen Sie vorsichtig mit dem Netzkabel um. Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.
- Manipuler le cordon d'alimentation avec précaution. Tenir la prise lors du débranchement du cordon.
- Manneggiare il filo di alimentazione con cura. Agitare per la spina quando scollegate il cavo dalla presa.
- Maneje el cordón de energía con cuidado. Sostenga el enchufe cuando desconecte el cordón de energía.
- Hanteer het netsnoer voorzichtig. Houd het snoer bij de stekker vast wanneer deze moet worden aan- of losgekoppeld.
- Hantera nätkablen varsamt. Håll i kablarna när den kopplas från eluttaget.



- Keep the set free from moisture, water, and dust.
- Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.
- Protéger l'appareil contre l'humidité, l'eau et la poussière.
- Tenete l'unità lontana dall'umidità, dall'acqua e dalla polvere.
- Mantenga el equipo libre de humedad, agua y polvo.
- Laat geen vochtigheid, water of stof in het apparaat binnendringen.
- Utsätt inte apparaten för fukt, vatten och damm.



- Unplug the power cord when not using the set for long periods of time.
- Wenn das Gerät eine längere Zeit nicht verwendet werden soll, trennen Sie das Netzkabel vom Netzstecker.
- Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.
- Disinnestare il filo di alimentazione quando avete l'intenzione di non usare il filo di alimentazione per un lungo periodo di tempo.
- Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo. Espere unos 5 segundos después de apagar el aparato antes de desenchufar el cable de alimentación.
- Naem altijd het netsnoer uit het stopcontact wanneer het apparaat gedurende een lange periode niet wordt gebruikt. Wacht ongeveer 5 seconden na het uitschakelen van de spanning alvorens het netsnoer los te koppelen.
- Koppla ur nätkablen om apparaten inte kommer att användas i lång tid. Vänta i ca 5 sekunder efter det att du slagit av strömmen innan du drar ut nätkablen.



(For sets with ventilation holes)

- Do not obstruct the ventilation holes.
- Die Belüftungsöffnungen dürfen nicht verdeckt werden.
- Ne pas obstruer les trous d'aération.
- Non coprite i fori di ventilazione.
- No obstruya los orificios de ventilación.
- De ventilatieopeningen mogen niet worden beblokkeerd.
- Tåpp inte till ventilationsöppningarna.



- Do not let foreign objects in the set.
- Keine fremden Gegenstände in das Gerät kommen lassen.
- Ne pas laisser des objets étrangers dans l'appareil.
- E' importante che nessun oggetto è inserito all'interno dell'unità.
- No deje objetos extraños dentro del equipo.
- Laat geen vreemde voorwerpen in dit apparaat vallen.
- Se till att främmande föremål inte tränger in i apparaten.



- Do not let insecticides, benzene, and thinner come in contact with the set.
- Lassen Sie das Gerät nicht mit Insektiziden, Benzin oder Verdünnungsmitteln in Berührung kommen.
- Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.
- Assicuratevi che l'unità non venga in contatto con insetticidi, benzolo o solventi.
- No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.
- Laat geen insektenverdelgende middelen, benzine of verfverdunder met dit apparaat in contact komen.
- Set till att inte insektmedel på spraybruk, bensen och thinner kommer i kontakt med apparatens hölje.



- Never disassemble or modify the set in any way.
- Versuchen Sie niemals das Gerät auseinander zu nehmen oder auf jegliche Art zu verändern.
- Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.
- Non smontate mai, né modificate l'unità in nessun modo.
- Nunca desarme o modifique el equipo de ninguna manera.
- Nooit dit apparaat demonteren of op andere wijze modificeren.
- Ta inte isär apparaten och försök inte bygga om den.

#### • DECLARATION OF CONFORMITY

We declare under our sole responsibility that this product, to which this declaration relates, is in conformity with the following standards: EN60065, EN55013, EN55020, EN60555-2 and EN60555-3.  
Following the provisions of 73/23/EEC, 89/336/EEC and 93/68/EEC Directive.

#### • ÜBEREINSTIMMUNGSERKLÄRUNG

Wir erklären unter unserer Verantwortung, daß dieses Produkt, auf das sich diese Erklärung bezieht, den folgenden Standards entspricht: EN60065, EN55013, EN55020, EN60555-2 und EN60555-3.  
Entspricht den Verordnungen der Direktive 73/23/EEC, 89/336/EEC und 93/68/EEC.

#### • DECLARATION DE CONFORMITE

Nous déclarons sous notre seule responsabilité que l'appareil, auquel se réfère cette déclaration, est conforme aux standards suivants: EN60065, EN55013, EN55020, EN60555-2 et EN60555-3.  
D'après les dispositions de la Directive 73/23/EEC, 89/336/EEC et 93/68/EEC.

#### • DICHIARAZIONE DI CONFORMITÀ

Dichiariamo con piena responsabilità che questo prodotto, al quale la nostra dichiarazione si riferisce, è conforme alle seguenti normative: EN60065, EN55013, EN55020, EN60555-2 e EN60555-3.  
In conformità con le condizioni delle direttive 73/23/EEC, 89/336/EEC e 93/68/EEC.  
QUESTO PRODOTTO E' CONFORME AL D.M. 28/08/95 N. 548

#### • DECLARACIÓN DE CONFORMIDAD

Declaramos bajo nuestra exclusiva responsabilidad que este producto al que hace referencia esta declaración está conforme con los siguientes estándares: EN60065, EN55013, EN55020, EN60555-2 y EN60555-3.  
Siguiendo las provisiones de las Directivas 73/23/EEC, 89/336/EEC y 93/68/EEC.

#### • EENVORMIGHEIDSVERKLARING

Wij verklaren uitsluitend op onze verantwoordelijkheid dat dit produkt, waarop deze verklaring betrekking heeft, in overeenstemming is met de volgende normen: EN60065, EN55013, EN55020, EN60555-2 en EN60555-3.  
Volgens de bepalingen van de Richtlijnen 73/23/EEC, 89/336/EEC en 93/68/EEC.

#### • ÖVERENSSTÄMMELSEINTYG

Härmed intygas helt på eget ansvar att denna produkt, vilken detta intyg avser, uppfyller följande standarder: EN60065, EN55013, EN55020, EN60555-2 och EN60555-3.  
Enligt stadgarna i direktiv 73/23/EEC, 89/336/EEC och 93/68/EEC.

#### ■ We greatly appreciate your purchase of the AVR-700RD.

■ To be sure you take maximum advantage of all the features the AVR-700RD has to offer, read these instructions carefully and use the set properly. Be sure to keep this manual for future reference should any questions or problems arise.

#### ■ Wir begrüßen Ihren Kauf des AVR-700RD außerordentlich.

■ Lesen Sie sich diese Bedienungsanleitung sorgfältig durch und bedienen Sie die Anlage richtig, damit Sie alle Merkmale, die der AVR-700RD zu bieten hat, maximal ausnutzen können. Bewahren Sie diese Bedienungsanleitung gut auf, so daß sie Ihnen bei eventuell auftretenden Fragen oder Störungen, jederzeit als Referenz zur Verfügung steht.

#### ■ Nous vous remercions de l'achat de AVR-700RD.

■ Pour être sûr de profiter au maximum de toutes les caractéristiques qu'a à offrir l'AVR-700RD, lisez avec soin ces instructions et bien utiliser l'appareil. Toujours conserver ce mode d'emploi pour s'y référer ultérieurement en cas de question ou de problème.

#### ■ Apprezziamo veramente il fatto che voi avete acquistato l'AVR-700RD.

■ Leggete questo manuale attentamente ed usate l'unità in modo corretto per ottenere le migliori prestazioni di tutte le caratteristiche dell'AVR-700RD. Tenete questo manuale in un luogo sicuro per futuri riferimenti in caso sorgessero dei dubbi.

#### ■ Le estamos sinceramente agradecidos por su compra del AVR-700RD.

■ A fin de aprovechar plenamente las características del AVR-700RD, lea detenidamente este manual de instrucciones antes de usar la unidad; asegúrese de operar la unidad correctamente, de acuerdo a las instrucciones. Conserve este manual para futuras consultas en caso de dudas o problemas.

#### ■ Wij stellen het zeer op prijs dat u de AVR-700RD heeft gekocht.

■ Om alle kenmerken die de AVR-700RD te bieden heeft optimaal te kunnen benutten, is het nodig dat u deze gebruiksaanwijzing nauwkeurig doorleest en dat u het toestel juist gebruikt. Houd de handleiding bij zodat u ze later kan raadplegen wanneer u vragen heeft of zich eventueel problemen voordoen.

#### ■ Vi tackar dig för ditt val av AVR-700RD.

■ Läs bruksanvisningen noga och följ föreskrifterna, så att du säkert kan utnyttja egenskaperna hos din AVR-700RD på bästa sätt. Behåll bruksanvisningen som hjälp i framtiden om frågor eller problem skulle uppstå.

"SERIAL NO. \_\_\_\_\_  
PLEASE RECORD UNIT SERIAL NUMBER ATTACHED TO THE REAR OF  
THE CABINET FOR FUTURE REFERENCE"

"SERIENNR. \_\_\_\_\_  
NOTIEREN SIE BITTE HIER DIE AUF DER RÜCKSEITE DES GERÄTES  
ANGEBRACHTE SERIENNUMMER FÜR DEN SPÄTEREN ZUGRIFF"

"NO. DE SERIE \_\_\_\_\_  
PRIERE DE NOTER LE NUMERO DE SERIE DE L'APPAREIL INSCRIT A  
L'ARRIERE DU COFFRET DE FAÇON A POUVOIR LE CONSULTER EN CAS  
DE PROBLEME."

"NUMERO DI SERIE \_\_\_\_\_  
SEGNARE IL NUMERO DI SERIE INDICATO SUL RETRO DELL'INVOLUCRO  
PER FUTURI RIFERIMENTI"

"Nº DE SERIE \_\_\_\_\_  
PARA FUTURAS CONSULTAS, REGISTRE AQUÍ EL NUMERO DE SERIE DE  
LA UNIDAD, SITUADO EN LA PARTE POSTERIOR DEL GABINETE."

"SERIENR. \_\_\_\_\_  
NOTEER HET SERIENUMMER, DAT ZICH OP DE ACHTERKANT VAN HET  
TOESTEL BEVINDT, VOOR LATERE NASLAG"

"SERIENR. \_\_\_\_\_  
ANTECKNA APPARATENS SERIENUMMER, SOM ÄR FÄST PÅ  
BAKSTYCKET, OCH SPARA DET FÖR FRAMTIDA BEHOV"

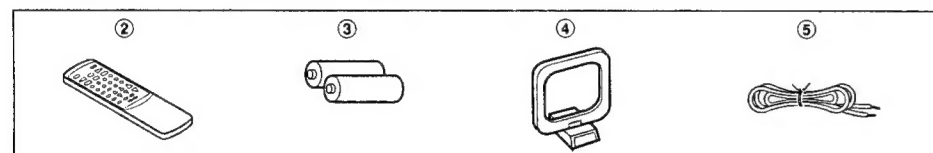
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### ACCESSORIES

Check that the following parts are included in addition to the main unit:

1 Operating instructions .....	1	4 AM loop antenna .....	1
2 Remote control unit (RC-840) .....	1	5 FM indoor antenna .....	1
3 R6P/AA batteries .....	2		



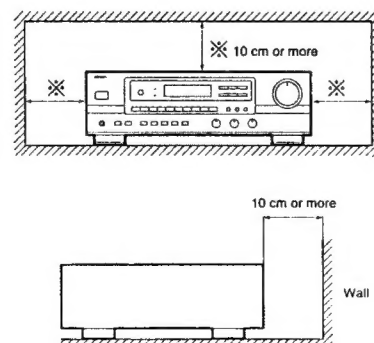
## 1 INTRODUCTION

### INSTALLATION PRECAUTIONS

Using this receiver or other electronic equipment containing microprocessors simultaneously with a tuner or TV may result in noise in the sound or picture. If this should happen, take the following steps:

- Install this unit as far as possible from the tuner or TV set.
- Keep the antenna lines of the tuner or TV as far as possible from the receiver's power cord and connection cables.
- This problem is especially frequent when using indoor antennas. We recommend using outdoor antennas and 75  $\Omega$ /ohms coaxial cables.

For heat dispersal, leave at least 10 cm of space between the top, back and sides of this unit and the wall or other components.



#### CAUTION:

Whenever the POWER operation switch is in the OFF position, the unit is still connected on AC line voltage. Please be sure to unplug the cord when you leave home for, say, a vacation.

## 2 CONNECTIONS

- Do not plug in the power cord until all connections have been completed.
- Be sure to connect the left and right channels properly (left with left, right with right).
- Insert the plugs securely. Incomplete connections will result in the generation of noise

- Note that binding pin plug cords together with power cords or placing them near a power transformer will result in the introduction of hum or other noise.
- Noise or humming may be generated if a connected component is used independently without turning the power of the AVR-700RD on. If this happens, turn on the power of the AVR-700RD.

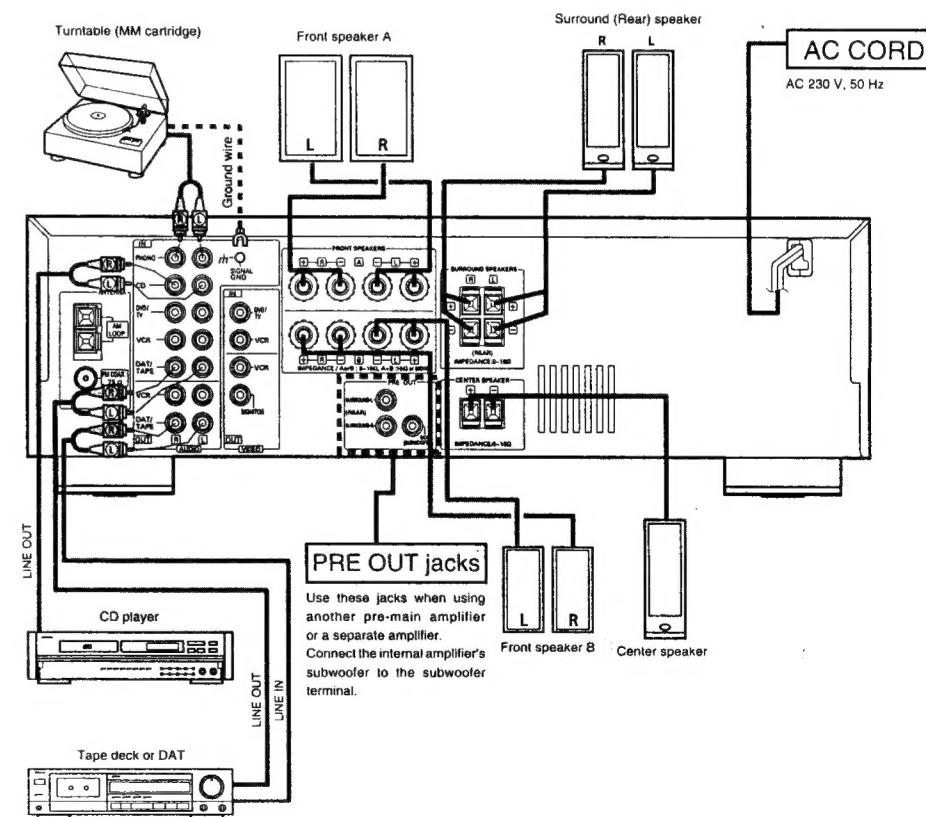
### 2-1 Connecting the audio components

#### NOTE:

This unit cannot be used with MC cartridges directly. Use a separate head amplifier or step-up transformer.

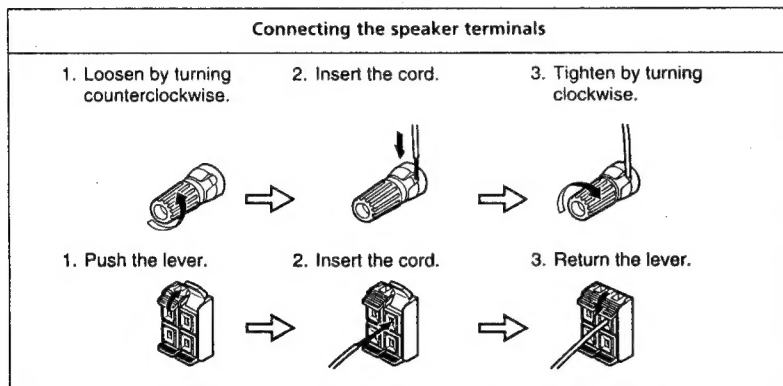
#### Precautions when connecting speakers

If a speaker is placed near a TV or video monitor, the colors on the screen may be disturbed by the speaker's magnetism. If this should happen, move the speaker away to a position where it does not have this effect.



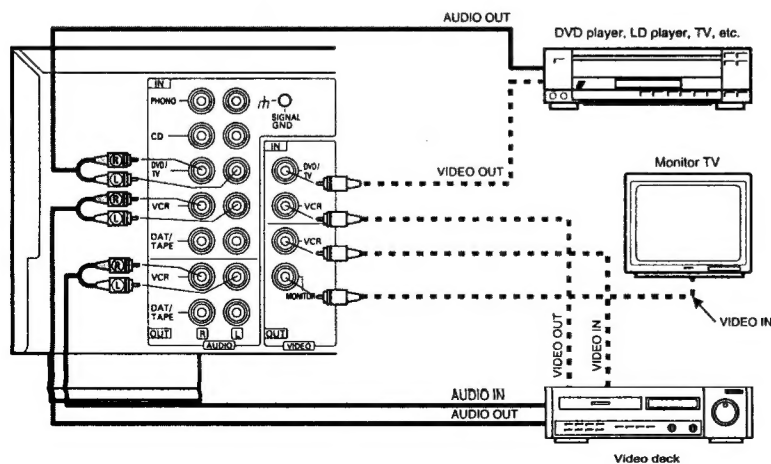
## 2-2 Speaker System Connections

- This unit can accommodate connections of a total of seven speakers including two set of front speakers (A and B), one set of SURROUND (REAR) speakers, and one center speaker.
- Connect the speaker terminals with the speakers making sure that like polarities are matched (⊕ with ⊕, ⊖ with ⊖). Mismatching of polarities will result in weak central sound, unclear orientation of the various instruments, and the sense of direction of the stereo being impaired.
- When making connections, take care that none of the individual conductors of the speaker cord come in contact with adjacent terminals, with other speaker cord conductors, or with the rear panel.
- Speaker Impedance**
  - When speaker systems A and B are use separately, speakers with an impedance of from 8 to 16 Ω/ohms can be connected.
  - When using with two pairs of speakers (A + B), use speakers with an impedance of 16 Ω/ohms or greater.
  - Speakers with an impedance of 8 to 16 Ω/ohms can be connected for use as center and SURROUND (REAR) speakers.
  - The protection circuit may operate or damage may occur when speakers with an impedance outside of the above range are used.

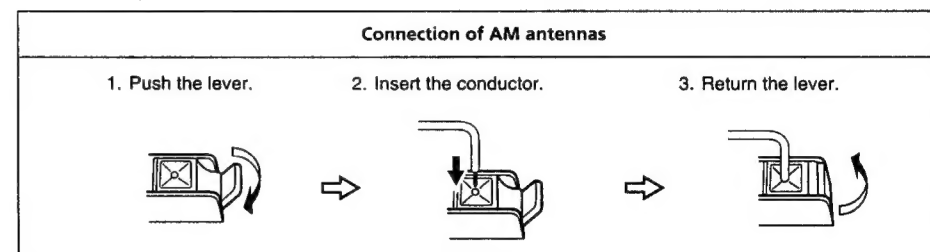
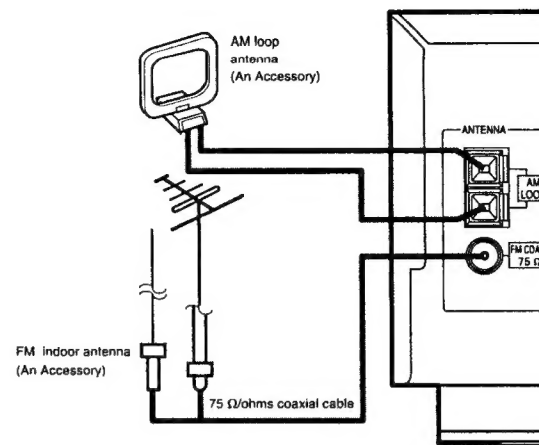


## 2-3 Connecting the video components

To connect the video signal, connect using a 75 Ω/ohms video signal cable cord. Using an improper cable can result in a drop in sound quality.



## 2-4 Connecting the antenna terminals



## ANTENNA INSTALLATION

- FM ANTENNA**  
The supplied FM antenna can be used inside wooden houses for receiving local FM stations and other strong FM signals. Stretch out the ends of the antenna and mount the antenna on the wall or ceiling where optimum reception is achieved. A indoor FM antennas may not consistently ensure stable reception, due to environment changes. In such cases, the indoor FM antenna should only be used temporarily until an outdoor FM antenna has been installed.  
When connecting an outdoor FM antenna, the use of 75 Ω/ohms coaxial cable (3C-2V, 5C-2V) is strongly recommended.
- AM ANTENNA**  
Tune in an AM station (refer to page 9) listen to the sound, then install the antenna in a position as far from the set as possible in which distortion and noise are minimum. Good reception of AM stations is not possible if the loop antenna is not connected or if it is touching metal objects.

### NOTES

- This receiver has a full back-up system. When the power is turned on, the INPUT SELECTOR buttons are set to the last mode set before the power was turned off.
- When using this receiver in close proximity to video equipment (TV, VCR, DVD, etc.), noise may be generated in AM broadcasts. To avoid this, keep the receiver as far away from other video components as possible, or place the AM loop antenna where noise is reduced. If the noise is not reduced, turn off the power of the video components when listening to AM broadcasts.

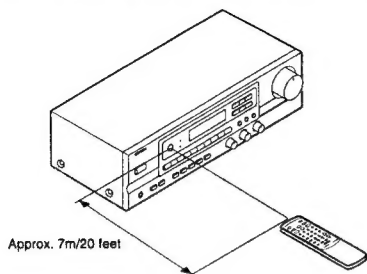
### Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

### 3 REMOTE CONTROL UNIT

Following the procedure outlined below, insert the batteries before using the remote control unit.

#### Range of operation of the remote control unit

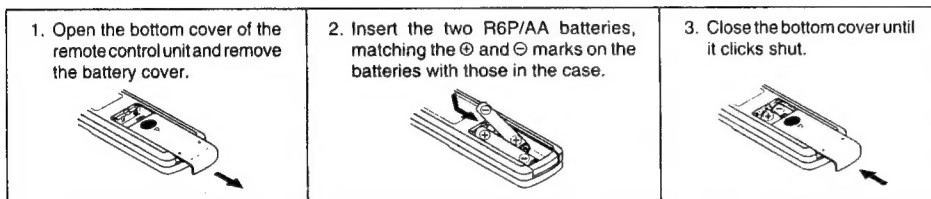


Point the remote control unit at the remote control sensor as shown on the diagram at the left.

#### NOTES:

- The remote control unit can be used from a straight distance of approximately 7 meters/20 feet, but this distance will shorten or operation will become difficult if there are obstacles between the remote control unit and the remote control sensor, if the remote control sensor is exposed to direct sunlight or other strong light, or if operated from an angle.
- Neon signs or other devices emitting pulse-type noise nearby may result in malfunction, so keep the set as far away from such devices as possible.

#### Inserting the batteries

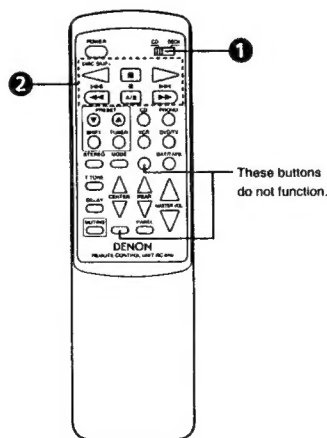
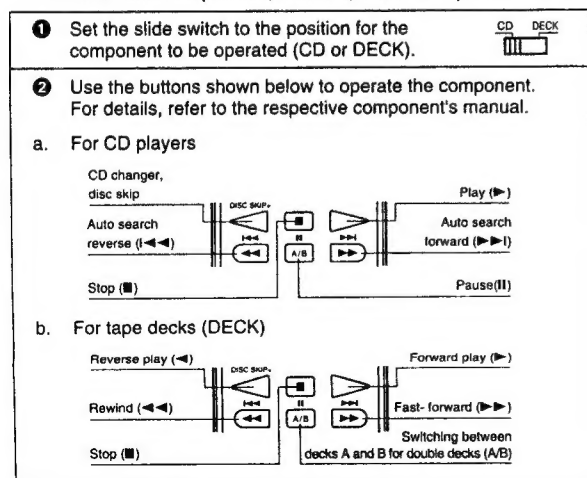


#### NOTES:

- Use only AA, R6P, UM-3 batteries for replacement.
- Be sure the polarities are correct. (See the illustration inside the battery compartment.)
- Remove the batteries if the remote control transmitter will not be used for an extended period of time.
- If batteries leak, dispose of them immediately. Avoid touching the leaked material or letting it come in contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.
- Have replacement batteries on hand so that the old batteries can be replaced as quickly as possible when the time comes.

#### System code buttons

DENON remote-controllable audio components can be controlled using this unit's remote control unit. Note that some components, however, cannot be operated with this remote control unit.



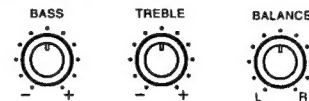
### 4 OPERATIONS

#### 4-1 Preparations for playback

- Check that all connections are proper.
- Set to the minimum position.



- Set to the center position.



- Turn on the power. Press the POWER operation switch (button).

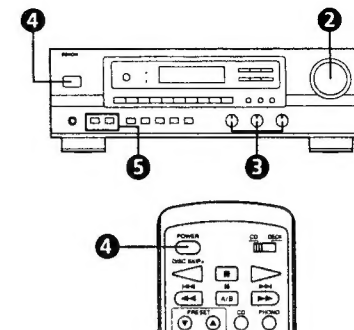


#### ON/STANDBY

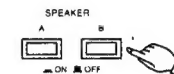
The power turns on and "STANDBY" indicator is lit. Several seconds are required from the time the POWER operation switch is set to the "ON/STANDBY" position until sound is output. This is due to the built-in muting circuit that prevents noise when the POWER operation switch is turned on and off. Set the POWER operation switch to this position to turn the power on and off from the included remote control unit (RC-840).

#### OFF

The power turns off and "STANDBY" indicator is off. In this position, the power cannot be turned on and off from the remote control unit.



- Select the front speakers. Press the speaker A or B switch to turn the speaker on.

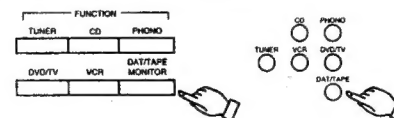


#### NOTE:

In the standby mode  
If you lose the remote control unit, the power can be turned on by initializing the microprocessor. For the operating procedure, see:  
[6] INITIALIZATION OF THE MICROPROCESSOR on page 10  
Note that this operation will clear the last function memory.

#### 4-2 Playing the program source (Stereo playback)

- Select the source to be played.



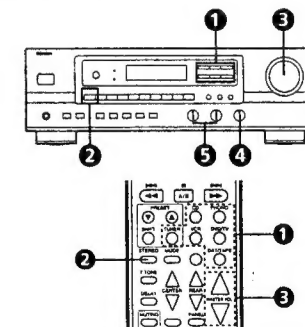
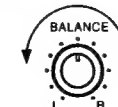
- Select the STEREO mode.



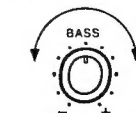
- Adjust the MASTER VOLUME control.



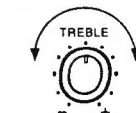
- Adjust the front left/right BALANCE. Turn the control counterclockwise to reduce the volume of the right channel, clockwise to reduce the volume of the left channel.



- Adjust the BASS and TREBLE.



Turn the control clockwise to increase the bass, counter-clockwise to decrease it.



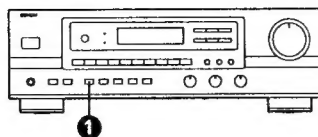
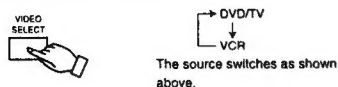
Turn the control clockwise to increase the treble, counter-clockwise to decrease it.



### 4-3 Simulcast playback

Use this switch to monitor a video source other than the audio source.

- Press and hold the VIDEO SELECT button until the desired source appears on the display.



- \* Cancelling simulcast playback
- Press the VIDEO SELECT button once more.
- Select the VIDEO function.

### 4-4 Using the muting function

Use this to turn off the audio output temporarily.

- Press the MUTING button.
- \* Cancelling MUTING mode.
- Press the MUTING button again.



This function can only be set from the remote control unit.  
The STANDBY LED flashes when the muting function is set.

### 4-6 Recording the program source (recording the source currently being monitored)

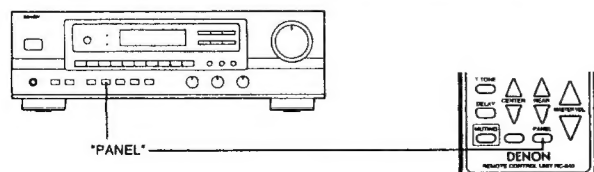
- Follow steps 1 to 3 under "Playing the program source". (refer to page 6)
  - Start recording on the tape or video deck.
- For instructions, refer to the component's operating instructions.

#### Simultaneous recording

The signals of the source selected with the function selector button are output simultaneously to the DAT/TAPE and VCR REC OUT jacks. If a total of two tape and/or video decks are connected and set to the recording mode, the same source can be recorded simultaneously on both decks.  
In addition, if the TAPE MONITOR (DAT/TAPE) button is pressed, the audio signals from the tape deck are output to the VCR AUDIO REC OUT jacks.

### 4-7 Front panel display

Descriptions of the unit's operations are also displayed on the front panel display. In addition, the display can be switched to check the unit's operating status while playing a source by pressing the PANEL button.



### 4-8 Using the surround function

#### Types of surround modes and their characteristics

1	DOLBY PRO LOGIC	Use this when playing program sources recorded in Dolby Surround or Dolby Stereo.
2	CONCERT HALL	Use this setting to create the atmosphere of a concert hall. There will be no output from the center speaker.
3	LIVE	Use this setting to create the atmosphere of watching a live performance. There will be no output from the center speaker.

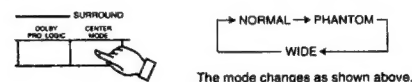
#### Before using the surround function

Make the following adjustments before using the surround function.

- Set the Dolby Pro Logic mode.



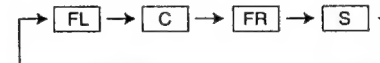
- Select the center mode. (refer to page 8)  
Select the center mode according to the center speaker.



- Emit the test tone.



Test tones are produced from the speakers in the order shown below, at 4 second intervals for the first two cycles, 2 second intervals after that.



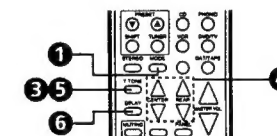
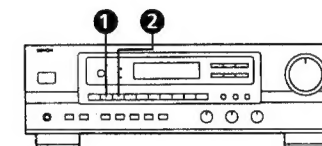
- Adjust the center and surround (rear) levels to set the volume of the speakers to the same level.

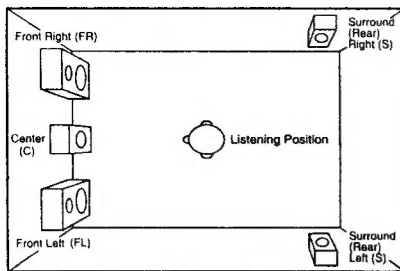


- Turn the test tone off.

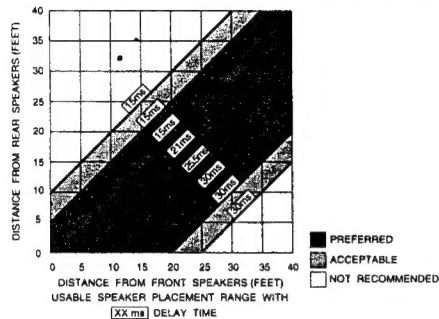


- Adjust the delay time and seating position as necessary. (refer to page 8)





Dolby Surround systems with Pro Logic decoding most closely replicate the Dolby Stereo theatrical experience. Only two surround speakers are necessary in the home listening environment to provide the same enveloping soundfield as multiple surround speakers in the theater.



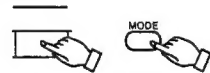
#### Personal Memory Plus function . . . . for EASY TO USE

The AVR-700RD automatically stores the surround mode adding effects for all input sources. The corresponding surround mode is recalled automatically each time an input source is selected.

#### • Using the surround function

After adjusting using the test tones, adjust the channel levels either according to the playback sources or to suit your tastes, as described below.

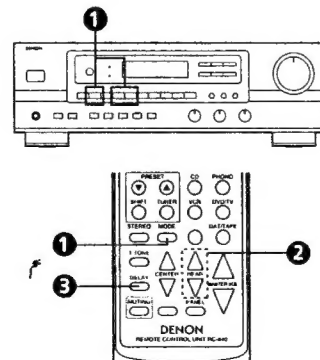
- 1 Select the surround mode according to the input source.



- 2 If necessary, adjust the levels.



- 3 Adjust the parameters to the desired settings.



Manufactured under license from Dolby Laboratories Licensing Corporation.  
"Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.  
Copyright 1992 Dolby Laboratories, Inc. All rights reserved.

#### Center Mode

Set the center mode as described below, according to the type of center speaker being used.

**Normal mode:** This mode is suited for an arrangement in which the center channel speaker is smaller than the left and right speakers. Signals below 100 Hz which have almost no effect on directional orientation are distributed to the left and right channels, whereas the center channel output signals greater than 100Hz. As a result, the bass of the left and right channels increases the apparent deepness of the sound.

**Wide mode:** This mode is suited for an arrangement in which the center channel speaker is of the same grade as the left and right speakers. The entire sound band from low region to high is output to the center channel to provide an exciting sound field for your enjoyment.

**Phantom mode:** Use this mode when center channel speaker is not used. A directional emphasis circuit provides signal reproduction which is electrically oriented to the center and this provides an exciting sound field for your enjoyment.

#### Delay Time

The optimum delay time will differ depending on the listening position. Referring to the chart at left, set the optimum delay time for your room's space and seating position. For example, when the distance from the front speakers to the listening position is 20 feet and that from the surround (rear) speakers to the listening position is 15 feet, the optimum delay time will be 21 ms.

The variable range of the delay time differs depending on the mode.

#### Operating Possible in the Various Surround Modes

The following is a list of the buttons and functions which can be operated during the different surround modes. Figures in parentheses indicate adjustment ranges.

		OUTPUT	CENTER LEVEL	SURROUND (REAR) LEVEL	CENTER MODE	TEST TONE	DELAY TIME
DOLBY	NORMAL	○	○ (0 ~ -24dB)	○ (0 ~ -24dB)	○	○	○ (15 ~ 30ms)
	PHANTOM	○	X	○ (0 ~ -24dB)	○	○	○ (15 ~ 30ms)
PRO	WIDE	○	○ (0 ~ -24dB)	○ (0 ~ -24dB)	○	○	○ (15 ~ 30ms)
CONCERT HALL		○	X	○ (0 ~ -24dB)	△*1	X	○ (0 ~ 33ms)
LIVE		○	X	○ (0 ~ -24dB)	△*1	X	○ (0 ~ 33ms)

\*1 Switches to the Dolby Pro Logic from any modes other than Dolby Pro Logic. The level of the center, surround (rear) and sub woofer channels can be adjusted by 2 dB step.

The delay time can be set by 1.5 ms step.

○: Operation possible  
X: Operation not possible

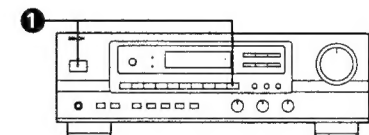
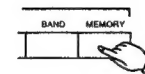
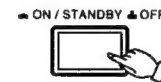
- The sound may be distorted for some sources if the surround (rear) level is raised during surround playback.  
If this happens, lower the surround (rear) level.

## 5 LISTENING TO THE RADIO

### 5-1 Auto preset memory

This unit is equipped with a function for automatically searching for FM broadcast stations and storing them in the preset memory.

- 1 Turn on the unit while holding in the MEMORY button. The unit automatically begins searching for FM broadcast stations.



- 2 When the first FM broadcast station is found, that station is stored in the preset memory at channel A1. Subsequent stations are automatically stored in order at preset channels A2 to A8, B1 to B8, C1 to C8, D1 to D8 and E1 to E8, for a maximum of 40 stations.
- 3 Channel A1 is tuned in after the auto preset memory operation is completed.

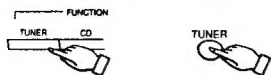
#### NOTES:

- If an FM station cannot be preset automatically due to poor reception, use the "Manual tuning" operation to tune in the station, then preset it using the manual "Preset memory" operation.
- RDS stations are stored in the memory priority.
- To interrupt this function, press the POWER operation button.

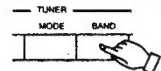


## 5-2 Auto tuning

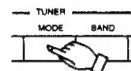
- 1 Set the input function to "TUNER".



- 2 Watching the display, press the BAND button to select the desired band (AM or FM).



- 3 Press the MODE button to set the auto tuning mode.



"AUTO" appears on the display.

## 5-3 Manual tuning

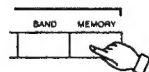
- 1 Set the input function to "TUNER".
- 2 Watching the display, press the BAND button to select the desired band.
- 3 Press the MODE button to set the manual tuning mode. Check that the display's "AUTO" indicator turns off.

### NOTES:

- When in the auto tuning mode on the FM band, the "STEREO" indicator lights on the display when a stereo broadcasts tuned in. At open frequencies, the noise is muted and the "TUNED" and "STEREO" indicators turn off.
- When the manual tuning mode is set, FM stereo broadcasts are received in monaural and the "STEREO" indicator turns off.

## 5-4 Preset memory

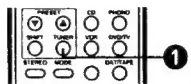
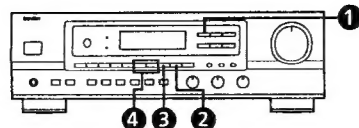
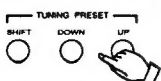
- 1 Use the "Auto tuning" or "Manual tuning" operation to tune in the station to be preset in the memory.
- 2 Press the MEMORY button.



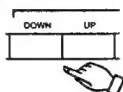
- 3 Press the SHIFT button and select the desired memory block (A to E).



- 4 Press the PRESET UP or DOWN button to select the desired preset channel (1 to 8).



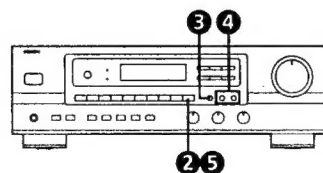
- 4 Press the TUNING UP or DOWN button.



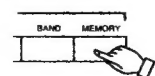
Automatic searching begins, then stops when a station is tuned in.

If tuning does not stop at the desired station, use to the "Manual tuning" operation.

- 4 Press the TUNING UP or DOWN button to tune in the desired station. The frequency changes continuously when the button is held in.



- 5 Press the MEMORY button again to store the station in the preset memory.



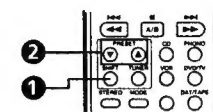
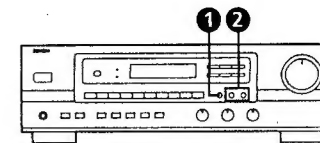
To preset other channels, repeat steps 2 to 5. A total of 40 broadcast stations can be preset—8 stations (channels 1 to 8) in each of blocks A to E.

## 5-5 Recalling preset stations

- 1 Watching the display, press the SHIFT button to select the preset memory block.



- 2 Watching the display, press the PRESET UP or DOWN button to select the desired preset channel.



## 5-6 RDS (Radio Data System)

RDS (works only on the FM band) is broadcasting service which allows station to send additional information along with the regular radio program signal.

The following three types of RDS information can be received on this unit.

### • Program Type (PTY)

PTY identifies the type of RDS program.

The program types and their displays are as follows:

NEWS	(News)	VARIED	(Varied)
AFFAIRS	(Current Affairs)	POP M	(Pop Music)
INFO	(Information)	ROCK M	(Rock Music)
SPORT	(Sports)	M.O.R. M	(M.O.R. Music)
EDUCATE	(Education)	LIGHT M	(Light Classics)
DRAMA	(Drama)	CLASSICS	(Serious Classics)
CULTURE	(Culture)	OTHER M	(Other Music)
SCIENCE	(Science)		

### • Traffic Program (TP)

TP identifies programs that carry traffic announcements.

This allows you to easily find out the latest traffic conditions in your area before you leaving home.

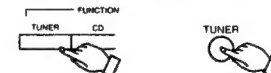
### • Radio Text (RT)

RT allows the RDS station to send text messages that appear on the display.

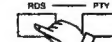
## 5-7 RDS Search

Use this function to automatically tune to FM stations that provide RDS service.

- 1 Set the input function to "TUNER".



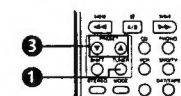
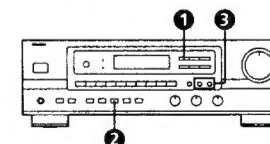
- 2 Press RDS button until "RDS SEARCH" appears on the display.



- 3 Press the PRESET UP or DOWN button to automatically begin the RDS search operation.



If no RDS stations is found with above operation, all the respection band are searched.



- 4 When a broadcast station is found, that station's name appears on the display.

- 5 To continue searching, repeat step 3. If no other RDS station is found when all the frequencies are searched, "NO RDS" is displayed.

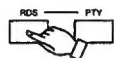
## 5-8 PTY Search

Use this function to find RDS stations broadcasting a designated program type (PTY).  
For a description of each program type, refer to "Program Type (PTY)".

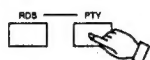
- 1 Set the input function to "TUNER".



- 2 Press the RDS button until "PTY SEARCH" appears on the display.



- 3 Watching the display, press the PTY button to call out the desired program type.

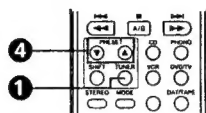
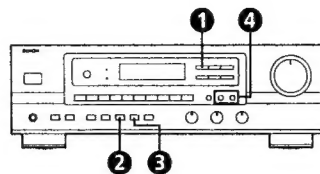


- 4 Press the PRESET UP or DOWN button to automatically begin the PTY search operation.



If there is no station broadcasting the designated programme type with above operation, all the reception bands are searched.

- 5 The station name is displayed on the display after searching stops.
- 6 To continue searching, repeat step 4.  
If no other station broadcasting the designated programme type is found when all the frequencies are searched, "NO PROGRAMME" is displayed on the display.



## 5-9 TP Search

Use this function to find RDS station broadcasting traffic programme (TP stations).

- 1 Set the input function to "TUNER".



- 2 Press RDS button until "TP SEARCH" appears on the display.

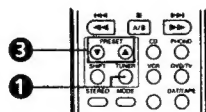
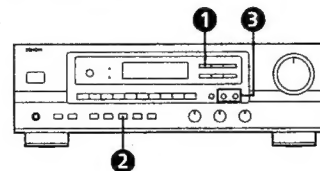


- 3 Press the PRESET UP or DOWN button TP search begins.



If no TP stations is found with above operation, all the respection bands are searched.

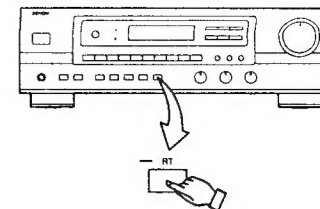
- 4 The station name is displayed after searching stops.
- 5 To continue searching, repeat step 3.  
If no other TP station is found when all the frequencies are searched, "NO PROGRAMME" is displayed.



## 5-10 RT (Radio Text)

"RT" appears on the display when radio text data is received.

When the RT button is pressed while receiving an RDS broadcast station, the text data broadcast from the station is displayed. To turn the display off, press the RT button again. If no text data is being broadcast, "NO TEXT DATA" is displayed.



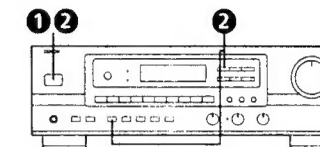
## 6 INITIALIZATION OF THE MICROPROCESSOR

When the indication of the display is not normal or when the operation of the unit does not shows the reasonable result, the initialization of the microprocessor is required by the following procedure.

- 1 Switch off the unit using the main unit's POWER operation switch.
- 2 Hold the following TUNER button and VIDEO SELECT button, and turn the main unit's POWER operation switch on.
- 3 Check that the entire display is flashing with an interval of about 1 second, and release your fingers from the 2 buttons.
- 4 Switch on the unit and the microprocessor will be initialized.

### NOTE:

- When the microprocessor is reset, all the settings you have made are reset to the values set upon shipment from the factory.



## 7 LAST FUNCTION MEMORY

- This unit is equipped with a last function memory which stores the input and output setting conditions as they were immediately before the power is switched off. This function eliminates the need to perform complicated resets when the power is switched on.
- This unit is also equipped with a back-up memory. This function provides approximately one week of memory storage with the power cord disconnected.

## 8 TROUBLESHOOTING

If a problem should arise, first check the following:

1. Are the connections correct?
2. Have you followed all operational instructions correctly?
3. Are the speakers, turntable, and other components operating properly?

If the receiver is not operating properly, check the items listed in the table below. Should the problem persist, there may be a malfunction. Disconnect the power immediately and contact your store of purchase.

	Symptom	Cause	Measures	Page
Common problems arising when listening to the CD, records, tapes, and FM broadcasts, etc.	DISPLAY not lit and sound not produced when power operation switch set to on.	• Power cord not plugged in securely.	• Check the insertion of the power cord plug.	4
	DISPLAY lit but sound not produced.	• Speaker cords not securely connected. • Speaker switch is off. • Improper position of the audio function button. • Volume control set to minimum. • MUTING is on.	• Connect securely.  • Turn on speaker switch. • Set to a suitable position.  • Turn volume up to suitable level. • Switch off MUTING.	4, 5 6 6 6 7
	-PROTECT- display appears.	• Speaker terminals are short-circuited. • Block the ventilation holes of the set.  • The unit is operating at continuous high power conditions and/or inadequate ventilation.	• Switch power off, connect speakers properly, then switch power back on. • Turn off the set's power, then ventilate it well to cool it down. Once the set is cooled down, turn the power back on. • Turn off the set's power, then ventilate it well to cool it down. Once the set is cooled down, turn the power back on.	4, 5 2, 4 2, 4
	Sound produced only from one channel.	• Incomplete connection of speaker cords. • Incomplete connection of input/output cords. • Left/right balance is off.	• Connect securely.  • Connect securely. • Adjust balance knob properly.	4, 5 4, 5 6
	Positions of instruments reversed during stereo playback.	• Reverse connections of left and right speakers or left and right input/output cords.	• Check left and right connections.	4, 5
	Sound seems distorted.	• Surround (rear) level is too high.	• Set the Surround (rear) level to lower level.	7, 8
When playing records	Humming noise produced when record is playing.	• Ground wire of turntable not connected properly. • Incomplete PHONO jack connection. • TV or radio transmission antenna nearby.	• Connect securely.  • Connect securely. • Contact your store of purchase.	4 4 —
	Howling noise produced when volume is high.	• Turntable and speaker systems too close together. • Floor is unstable and vibrates easily.	• Separate as much as possible.  • Use cushions to absorb speaker vibrations transmitted by floor. If turntable is not equipped with insulators, use audio insulators (commonly available).	— —
	Sound is distorted.	• Stylus pressure too weak. • Dust or dirt on stylus. • Cartridge defective.	• Apply proper stylus pressure. • Check stylus. • Replace cartridge.	— — —
	Volume is weak.	• MC cartridge being used.	• Replace with MM cartridge or use a head amplifier or step-up transformer.	4
Remote control unit	Receiver does not operate properly when remote control unit is used.	• Batteries dead. • Remote control unit too far from receiver. • Obstacle between receiver and remote control unit. • Different button is being pressed. • ⊕ and ⊖ ends of battery inserted in reverse.	• Replace with new batteries. • Move closer.  • Remove obstacle.  • Press the proper button. • Insert batteries properly.	6 6 6 6 6

## 9 SPECIFICATIONS

### • Audio Section

(Power amplifier)

Rated output:

(All properties shown are only for the power amplifier stage.)

FRONT

55 W + 55 W (8 Ω/ohms, 20 Hz – 20 kHz with 0.08 % THD)

CENTER

55 W (8 Ω/ohms, 20 Hz – 20 kHz with 0.08 % THD)

SURROUND (REAR)

25 W + 25 W (8 Ω/ohms, 1 kHz with 0.9 % THD)

Front: 8 to 16 Ω/ohms

Center: 8 to 16 Ω/ohms

Surround (Rear): 8 to 16 Ω/ohms

Output terminals:

(Pre-amplifier)

Line input (Each line input – FRONT SP OUT)

Input sensitivity/impedance:

200 mV/47 kΩ/kohms

PHONO (MM): 2.5 mV/47kΩ/kohms

Frequency response:

10 Hz to 50 kHz:

± 3 dB

Tone control range:

BASS:

± 10 dB at 100 Hz

TREBLE:

± 10 dB at 10 kHz

Signal-to-noise ratio:

92dB (STEREO)

1.2 V

Rated output (Pre out):

Phono equalizer (PHONO input – REC OUT)

RIAA deviation:

± 1 dB (20 Hz to 20 kHz)

Signal-to-noise ratio:

74 dB (A weighting, with 5 mV input)

Rated output/Maximum output:

200 mV/8 V

Distortion factor:

0.03 % (1 kHz, 1 V)

### • Tuner Section

Receiving Range:

[FM] (note: μV at 75 Ω/ohms, 0 dBf = 1 x 10<sup>-15</sup> W)

87.50 to 108.00 MHz

[AM]

522 to 1611 kHz

Usable Sensitivity:

1.0 μV (11.2 dBf)

18 μV

50 dB Quieting Sensitivity:

MONO 1.6 μV (15.3 dBf)

STEREO 23 μV (38.5 dBf)

50 dB

Signal to Noise Ratio (IHF-A):

MONO 80 dB

STEREO 75 dB

Total Harmonic Distortion

MONO 0.15 %

(at 1 kHz)

STEREO 0.3 %

### • Video Section

Standard video jacks

Input and output level/impedance:

1 Vp-p/75 Ω/ohms

Frequency response:

2 Hz to 8 MHz + 0, – 3 dB

### • General

Power supply:

AC 230V, 50 Hz

Power consumption:

180 W

Maximum external dimensions:

434 (W) x 142 (H) x 315 (D) mm (17-3/32" x 5-19/32" x 12-25/64")

Weight:

7.8 kg (17 lbs 7 oz)

### • Remote control unit

System remote control

RC-840:

Total buttons: 28

DENON system code

CD player: 6 buttons } (SWITCHED)

Cassette deck: 6 buttons

AVR-700RD fixed codes:

22 buttons

Batteries: R6P/AA Type (two batteries)

External dimensions: 51 (W) x 175 (H) x 18.5 (D) mm

(2" x 6-57/64" x 47/64")

Weight: 100 g (Approx. 3.5 oz) (including batteries)

\* For purposes of improvement, specifications and design are subject to change without notice.